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# NEW MEXICO ENVIRONMENT DEPARTMENT

## Ground Water Quality Bureau

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#### **CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

October 24, 2007

Mr. Timothy E. Eastep, Manager Environment, Land & Water Chino Mines Company P.O. Box 7 Hurley, New Mexico 88043

RE: Comments on the Interim Removal Action Work Plan (golf course) dated August 2007 Smelter/Tailing Soils Investigation Unit (S/TSIU) Chino Administrative Order on Consent (AOC)

#### Dear Mr. Eastep:

The revised Interim Removal Action Work Plan was resubmitted to the New Mexico Environment Department (NMED) on August 16, 2007. The NMED has completed a review of the document and provides the following comments on this submittal to complete the development of a final proposal. The NMED requires a response to comments within fifteen (15) days of receipt of this letter.

#### General Comments

- 1. Provide an explanation of how the 5000+ ppm areas will be delineated and describe what soil size fraction was analyzed with the XRF along with the number of samples and grid size necessary to delineate the area of remediation.
- 2. Chino proposes to remove all soil with a copper concentration greater than 2,700 mg/kg based on ecological risk. The ecological risk assessment has not been finalized; therefore, NMED may require a more stringent cleanup level upon finalization of the ecological risk assessment, which will require Chino to complete additional soil removal. Please revise the final document to include this acknowledgement.
- 3. Revise the document to include the seed mix, time and type of application and success criteria for re-vegetation of all disturbed areas.







- 4. Revise Figures by deleting the eastern section included in the earlier versions of the Work Plan.
- 5. Revise the sampling plan to include soil paste pH.

### **Specific Comments**

- 5. Section 2.7.3, <u>Rangeland Conditions</u>: Please revise the first sentence of the last paragraph of this Section to read "Based on ... forth in the <u>Final Site-wide ERA ...</u>."
- 6. Section 2.9, Extent of Contamination: Please revise the Section to exclude "Razorback Ridge".
- 7. Section 3.2.2, <u>Site Preparation</u>: Please revise document to state that mesquite/brush piles shall not exceed 1,000 cubic feet. (Consider chipping material for mulch or organic matter amendment where needed.)
- 8. Section 3.3.1, <u>Sediment and Erosion Control</u>: the first paragraph refers to Figure 7, but should refer to Figure 6. Revise the document to reflect this change.
- 9. Section 3.3.1, <u>Sediment and Erosion Control</u>: the third paragraph refers to BMPs for controlling runoff and run-on, please list specific BMPs to be used.
- 10. Section 3.3.1, <u>Sediment and Erosion Control</u>: the fourth paragraph refers to erosion control, but does not include proposed areas to the east and north of the golf course. Please revise.
- 11. Section 3.3.1, <u>Sediment and Erosion Control</u>: the third and fourth paragraphs refer to "tackifier". Please add a brief description of this product (i.e., application, expected timeframe of usefulness, etc.).
- 12. Section 3.3.1, <u>Sediment and Erosion Control</u>: please clarify "excessive dust" in the fifth paragraph. Explain what type of dust monitoring will occur once soil has been removed and what level of dust will trigger placement of dust control/tackifier.
- 13. Section 3.3.2, Worker and Residential Protection: please provide the "site-specific HASP" as an Appendix to the final Work Plan.
- 14. Section 3.4, <u>Post-Removal Confirmation Sampling</u>: the second paragraph refers to Appendix B, but should refer to Appendix A. Please revise the document to reflect this change.
- 15. Section 3.4, <u>Post-Removal Confirmation Sampling</u>: please clarify if bulk or sieved soil will be analyzed with the XRF.
- 16. Section 3.4.1, <u>Determination of Sample size</u>: this Section refers to Appendix A, but should refer to Appendix B. Please revise the document to reflect the change.

- 17. Section 3.4.1, <u>Determination of Sample size</u>: the paragraph beginning "Using the input ...." refers to Figure 8, but there is no Figure 8 (may refer to Figure 7). Please revise to reflect change.
  - 18. Section 3.4.1, <u>Determination of Sample size</u>: Section 3.4 states "This procedure will continue until all samples are below the target cleanup level." Then Section 3.4.1 attempts to explain why it is not necessary to follow that procedure. Please clarify the confirmation sampling procedure.

Table 2: revise	similar to	table below.	Revise Appendix B if necessary.

Parameter	Value	Description	Note
α	5%	False positive rate, gives 95% confidence.	5% chance of concluding area is clean when it is really still contaminated.
β	20%	False negative rate.	80% chance of concluding area is clean when it really is clean.
P <sub>0</sub>	5%	Target percentage goal.	Conclude area is clean if less 5% of samples exceed 2700 ppm.
$P_1$	2.5%	Assumed achieved percentage	Assumed percent of samples exceeding goal of 2700 ppm achieved after excavation.
$n_d$	384	Number of samples required.	Calculated value.

A simpler approach would be to lay down a reasonable size grid, take the confirmation samples, and calculate whether  $\leq$ 5% of the samples in a defined subarea exceed 2700 ppm. (a subarea would be each of the areas outlined in red on Figure 7) If more than 5% exceed, then additional excavation is needed in that subarea.

19. Sections 3.2.1 and 4.6: please provide an update regarding outcome of the coordination with NMDOT and the rail operator, also the town of Hurley and Grant County if necessary. The NMED would like to complete this Interim Removal Action on right-of-ways and not need to return for the final remedy. Provide contact information for NMED to inquire regarding limited remediation on those properties.

If you have any questions you may contact me at 338-1934.

Sincerely,

Phil Harrigan, Chino AOC Project Manager Mining Environmental Compliance Section

Ground Water Quality Bureau

Silver City Field Office

Cc: Mary Ann Menetrey, NMED

Jerry Schoeppner, NMED Mark Purcell, USEPA